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AP - JP19890064540 19890315

CPY - TORA

DC - A32 A35 F01 P43

FS - CPI;GMPI

IC - B08B3/12 ; C23G1/02 ; C23G5/00 ; D01D4/04

KS - 0229 2367 2476 2486

MC - A11-B15B A11-C A12-S05L F01-C F01-C01 F01-C03

PA - (TORA ) TORAY IND INC

PN - JP3019906 A 19910129 DW199111 000pp

PR - JP19890064540 19890315

XA - C1991-032151

XIC - B08B-003/12 ; C23G-001/02 ; C23G-005/00 ; D01D-004/04

XP - N1991-058626

— AB - J03019906 Melt-spinning nozzle adhered with a polymer is carbonised with heat and cleaned by ultrasonic wave of 1-100 W/cm<sup>2</sup> at frequency 10 x 10 power<sup>3</sup> - 60 x 10 power<sup>3</sup> Hz, in acid bath of e.g. phosphoric acid, oxalic acid and maleic acid at temp. lower than 80 deg.C.

- Carbonising of the nozzle after melt-spinning is carried out by (1)

salt decomposition process or (2) by carbonising with heat in a fluid bed by heated alumina at 400-480 deg.C.

- USE/ADVANTAGE - According to the process, cleaning of nozzle adhered with metal cpds. e.g. Cu, Sn, Mn, As, Co, Fe and Ni is decreased. (5pp Dwg.No.0/2)

IW - CLEAN PROCESS MELT SPIN NOZZLE ADHERE POLYMER CARBONISE HEAT CLEAN  
ULTRASONIC WAVE ACID BATH PHOSPHORIC ACID

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NC - 001

OPD - 1989-03-15

ORD - 1991-01-29

PAW - (TORA ) TORAY IND INC

TI - Cleaning process for melt-spinning nozzle - which is adhered with polymer and carbonised with heat is cleaned by ultrasonic wave in acid bath e.g. phosphoric acid